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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/190,788

11/12/1998

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97-019-DIV

7074

29883

7590

07/31/2008

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EXAMINER

TRIMIEW, RAEANN

ART UNIT

PAPER NUMBER

3711

MAIL DATE

DELIVERY MODE

07/31/2008

PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* CHRISTOPHER N. MACROGLOU

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Appeal 2008-2972  
Application 09/190,788  
Technology Center 3700

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Decided: July 31, 2008

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Before LORA M. GREEN, RICHARD M. LEBOVITZ, and  
FRANCISCO C. PRATS, *Administrative Patent Judges*.

GREEN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the  
Examiner's final rejection of claims 1, 2, 13-20, 27, and 28.<sup>1</sup> We have

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<sup>1</sup> Claims 21-24 have been indicated as being allowable (App. Br. dated September 29, 2006, at 2). In addition, the Examiner has withdrawn the rejection of claims 29-31 under 35 U.S.C. § 112, first paragraph (Ans. 3).

jurisdiction under 35 U.S.C. § 6(b). Claims 1 and 15 are representative of the claims on appeal, and reads as follows:

1. A device for assisting a person in achieving proper alignment of the person's eyes when the person is in position to perform a task, comprising:
  - a mechanism adapted to project a generally linear extending projection of light on a surface so that the extending projection of light is visible to the person,
  - a support member suitable to be donned upon the person's head;
  - the mechanism being attached to the support member in an orientation such that the extending projection of light is generally parallel to an alignment of a plane transversing the person's eyes when the person is in position to perform the task.
  
15. A device for assisting a person in achieving proper alignment of a portion of the person's body in a desired direction when the person is in position to execute a golf stroke, the device comprising:
  - a mechanism adapted to create a line of light on a surface such that the line of light is visible to the person
  - a support member to be worn by the person upon the person's body;
  - the mechanism being attached to the support member in an orientation so that the line of light is generally parallel to a line passing transversely through the portion of the person's body to provide to the person an indication of the alignment of the portion of the person's body.

The Examiner relies on the following references:

Harkness	US 5,467,992	Nov. 21, 1995
Carney	US 6,213,887 B1	Apr. 10, 2001

We affirm.

## DISCUSSION

Claims 1, 2, 13-20, 27, and 28 stand rejected under 35 U.S.C. § 103(a) as being obvious over the combination of Harkness and Carney.

The Examiner relies on Harkness for teaching “a device support member worn around a person’s head and an attached laser light . . . generating a linear alignment beam of light visible to the person to provide an alignment of the person’s body when in position to perform [a] task.” (Ans. 3.) According to the Examiner, the device of Harkness differs from the device of claim 1 as it discloses a spot of light on the ground, and does not specifically teach a line of light (*id.* at 4).

Carney is then cited for teaching “a golfing practice aid for proper alignment comprising a laser projecting a spot of light or a line of light.” (Ans. 4.)

According to the Examiner, one skilled in the art “would have modified the invention of Harkness with Carney by changing the spot of light to a line by routine experiment since Carney clearly suggest the use of a spot or line of light is interchangeable.” (Ans. 4.)

The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) secondary considerations of nonobviousness, if any. *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

The Supreme Court has recently emphasized that “the [obviousness] analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007). “The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 1739. Moreover, an “[e]xpress suggestion to substitute one equivalent for another need not be present to render such substitution obvious.” *In re Fout*, 675 F.2d 297, 301 (CCPA 1982). We conclude that the Examiner has established a prima facie case of obviousness over the cited prior art. We thus turn to Appellant’s argument in rebuttal.

As to claim 1, Appellant argues that the “device of Harkness does not provide any information to the user thereof regarding the alignment of the person’s eyes or any portion of the persons’ body.” (App. Br.<sup>2</sup> 9.) Appellant stresses that “Harkness does not even address the problem of determining alignment of the person’s eyes or any other portion of the body the user thereof.” (*Id.*) Moreover, according to Appellant, “neither Harkness nor Carney is not designed to or operable to provide information on alignment of the user’s body.” (*Id.* at 10.) Thus, Appellant asserts, as “neither Harkness nor Carney are designed to provide feedback to the user regarding the actual alignment of the user’s body, and neither Harkness nor Carney even address the problem of providing such feedback, there is absolutely no teaching or reason for one skilled in the art to combine the

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<sup>2</sup> All references to the Appeal Brief are to the Revised Appeal Brief dated July 16, 2007.

teaching of Harkness with the teaching of Carney to arrive at the present invention.” (*Id.*)

Appellant argues further that even if one were to combine the line of light of Carney with the device of Harkness, one would still not arrive at the present invention (App. Br. 11). According to Appellant, “[c]onverting the spot of light projected by the device of Harkness to a line of light would not provide a line of light generally parallel to the alignment line passing transversely through the person’s eyes or any portion of the person’s body as claimed in the present invention,” and that neither reference teaches or suggests aligning the line “generally parallel to an alignment of a plane transversing the person’s eyes.” (*Id.* at 11-12.)

During prosecution before the Office, claims are to be given their broadest reasonable interpretation consistent with the Specification as it would be interpreted by one of ordinary skill in the art. *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). “An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.” *In re Zletz*, 893 F.2d 319, 322 (Fed. Cir. 1989). Moreover, it is during prosecution that applicants have “the opportunity to amend the claims to obtain more precise claim coverage.” *American Academy*, 367 F.3d at 1364.

In this case, claim 1 is drawn to a device comprising (1) a mechanism adapted to project a generally linear extending projection of light on a surface so that the extending projection of light is visible to the person, and (2) a support member suitable to be donned upon the person’s head to which

the mechanism is attached wherein the generally linear extending projection of light is generally parallel to an alignment of a plane transversing the person's eyes. The statement in the preamble that the device assists "a person in achieving proper alignment" is a statement of intended use and not a patentable limitation as it adds no additional structural limitations to the device of claim 1. *See Rowe v. Dror*, 112 F.3d 473, 478 (Fed. Cir. 1997) ("Where . . . a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation.").

Harkness teaches a device that includes a mechanism for producing a light on a surface into a hitting area (*i.e.* the ground where the ball is placed), wherein the light source is a laser (Harkness Abstract). In addition, Harkness teaches that a red, oblong-shaped light is produced by the laser that is visible during daylight, and that a lens may be fastened to the free end of the laser to further focus the light spot (Harkness col. 3, ll. 22-26). Harkness also teaches that the mechanism may be mounted on a person's head by attachment to a hat, headband, or glasses (Harkness col. 2, ll. 61-65). Carney teaches a golf putting aid wherein a laser is used to generate a spot of light or a line of light (Carney col. 4, ll. 19-24).

We thus find that Harkness teaches "a support member suitable to be donned upon the person's head" to which the mechanism is attached, which support member may be a hat, a headband, or glasses, all of which are taught by Harkness as supports for the light generating mechanism. We also find that Harkness teaches "a mechanism adapted to project a generally linear extending projection of light on a surface so that the extending projection of light is visible to the person." (*Id.*) Note that the red, oblong shaped light

would read on a generally linear extending projection of light. Moreover, as Carney supports that a laser can be used to form a point or a line of light, we conclude that would have been obvious to use the laser of Harkness to produce a point or a line of light. In addition, Harkness teaches that a lens may be fastened to the free end of the laser to further focus the light spot, and thus would be capable of producing a line of light in any desired orientation. As noted by the United States Supreme Court,

If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

*KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1740 (2007).

We also find that Harkness provides motivation to use a line of light rather than a point of light, wherein the generally linear extending projection of light is generally parallel to the alignment of a plane transversing the person's eyes. First, as noted above, Harkness teaches that a red, oblong-shaped light, thus the light of Harkness would be wider in one plane than the other. Second, Harkness teaches that there are different planes that are used to determine swing faults (Harkness col. 6, l. 11-col. 7, l. 40). As can be seen from Figure 10, one of those planes, as shown by points "A" and "C" in Figure 10, is generally parallel to an alignment of a plane transversing the person's eyes, and are also located generally in the plane of the golf swing (Harkness col. 6, ll. 16-17). The use of a line in that plane would further allow a golfer to identify potential swing faults as taught by Harkness (*see*, *e.g.*, Harkness, col. 6, ll. 27-44), as the use of a line would allow one to



judge the angle of head placement to the plane of the golf swing, allowing further refinement of the swing.

We thus conclude that Harkness as combined with Carney teaches all of the limitations of the device of claim 1, and the rejection is thus affirmed as to that claim. As Appellant does not argue dependent claims 2, 13, 14, and 27 separately, the rejection is affirmed as to those claims as well. 37 C.F.R. § 41.37(c)(1)(vii).

As to claim 15, and the claims dependent thereon, Appellant reiterates the arguments made with respect to claim 1. Thus, the rejection is affirmed as to claim 15, and the claims dependent thereon, *i.e.*, claims 16-20 and 28, for the reasons set forth above with respect to claim 1.

### CONCLUSION

In summary, we conclude that the Examiner has set forth a prima facie case that claims 1, 2, 13-20, 27, and 28 are obvious over the combination of Harkness and Carney that has not been adequately rebutted by Appellant, and the rejection is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

Appeal 2008-2972  
Application 09/190,788

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